



COPY

Jeff Johnson
Air Management Compliance Officer
Wisconsin Department of Natural Resources
West Central Region Headquarters
1300 West Clairemont Avenue
P.O. Box 4001
Eau Claire, WI 54702-4001

July 11, 2011

Mr. Johnson,

This letter serves to certify our compliance with regard to Permit No. 627005280-P02 for our Taylor, WI manufacturing site. In accordance with Part 1, Item ZZZ, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of January 1, 2011 through June 30, 2011.

Please take note that as per your letter dated February 25, 2011, the column for Scrubber Liquid Turbidity has been removed from the monitoring data for Scrubber Units C50 and C150. This change was due to testing results that indicated the NTU values previous to stack testing conducted on January 12, 2011, did not represent a valid monitoring method to demonstrate compliance with the particulate matter emissions limit. The Atlas Resin Proppants Taylor Facility was released from utilizing specific monitoring compliance demonstration method, as required under conditions I.E.1.b.(6) and I.J.1.b.(6) of operation permit 627005280-P02 as of the February 25, 2011 date. As per the same letter, we are no longer required to record the solids content (NTU Values) under condition I.E.1.c.(3)(d) and I.J.1.c.(3)(d). This change has been effectively noted in our recent permit application renewal dated April 8, 2011.

If you have any questions regarding the changes to the monitoring data, please feel free to contact me at the number listed below.

Regards,

A handwritten signature in black ink that reads "Erica Grant". The signature is written in a cursive, flowing style.

Erica Grant
Production Manager
Atlas Resin Proppants, LLC – Taylor Facility



Appendix A

Atlas Resin Proppants, LLC

Taylor Manufacturing Facility

Tower A

CAM Plan Summary

Monitoring Data

Table 2
Monitoring Approach for Baghouse C20

	INDICATOR NO. 1
I. Indicator	Pressure Drop
Measurement Approach	Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 2 and 7 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C50

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator Measurement Approach	Pressure Drop Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Scrubber Liquid Flow Measure flow to wet scrubber with RCM Industries flowmeters.	Scrubber Liquid pH Measure pH of wet scrubber absorbing liquid with a Thermo Orion 3 Star pH probe.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 and 17 inches of H ₂ O.	Liquid flow of at least 45 gpm.	pH between 9.5 and 10.2
III. Performance Criteria			
A. Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.
C. QA/QC Practices and Criteria	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.
D. Monitoring Frequency	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.
E. Data Collection Procedures	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA	NA	NA



Appendix B

Atlas Resin Proppants, LLC

Taylor Manufacturing Facility

Tower B

CAM Plan Summary

Monitoring Data

Table 2
Monitoring Approach for Baghouse C120

	INDICATOR NO. 1
I. Indicator Measurement Approach	Pressure Drop Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 2 and 7 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C150

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator Measurement Approach	Pressure drop Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Scrubber Liquid Flow Measure flow to scrubber with RCM Industries flowmeters.	Scrubber Liquid pH Measure pH of scrubber liquid with a Thermo Orion 3 Star pH probe.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 to 17 inches.	Liquid flow of at least 45 gpm.	pH between 9.5 and 10.2.
III. Performance Criteria	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.
A. Data Representativeness	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.
B. Verification of Operational Status	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.
C. QA/QC Practices and Frequency	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."	Once every 8 hours of operation. Results are recorded in log, "Environmental Control's Inspection."
E. Data Collection Procedures	NA	NA	NA
F. Averaging Period	NA	NA	NA



January 16, 2012

Mr. Sonny Zentner
Air Management Compliance Officer
Wisconsin Department of Natural Resources
West Central Region Air Program
1300 West Clairemont
P.O. Box 4001
Eau Claire, WI 54702-4001

Dear Mr. Zentner,

This letter serves to certify our compliance with regard to Permit No. 627005280-PO2 for our Taylor, WI manufacturing site. In accordance with Part 1, Item ZZZ, Number 3.a.(1) attached in Appendix A and B are a summary of our CAM Plan and monitoring data required by the permit for Tower A and Tower B respectively for the period of July 1, 2011 through December 31, 2011.

Also find attached in Appendix C our Annual Certification of Compliance as required under Part 1, Item ZZZ, Number 3.a.(2). The Certification of Compliance is completed to reflect conditions of the variance issued by the Department dated February 25, 2011, a copy of which is attached to the Certification of Compliance for reference.

If you have any questions regarding the enclosed information, please do not hesitate to contact me at the number listed below.

Regards,

A handwritten signature in black ink that reads "Erica Grant". The signature is written in a cursive, flowing style.

Erica Grant
Production Manager
Atlas Resin Proppants, LLC – Taylor Facility
715-662-2200, ext. 231



Appendix A

Taylor Manufacturing Facility

Tower A

CAM Plan Summary

Monitoring Data

Table 2
Monitoring Approach for Baghouse C20

	INDICATOR NO. 1
I. Indicator Measurement Approach	Pressure Drop Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 1 and 8 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C50

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4 (Alternate)
I. Indicator	Pressure Drop	Scrubber Liquid Flow	Scrubber Liquid pH	Scrubber Liquid Flow Visual & Motor Power
Measurement Approach	Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Measure flow to wet scrubber with Dynasonic Fusions flowmeters.	Measure pH of wet scrubber absorbing liquid with a Thermo Orion 3 Star pH probe.	Observe to confirm flow of liquid from scrubber to sludge tank (gravity flow) and record motor power of scrubber liquor recirculation pump.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 and 17 inches of H ₂ O.	Liquid flow of at least 45 gpm.	pH between 9.5 and 10.2	Recirculation pump to draw between 5 and 10 amps.
III. Performance Criteria				
A. Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.	Consistent flow of liquor from scrubber into the sludge tank is observed by trained personnel.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.	Recirculation pump motor maintained in accordance with the manufacturer's recommendations.
C. QA/QC Practices and Criteria	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.	Trained personnel perform observations of flow and reading of motor power.
D. Monitoring Frequency	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.
E. Data Collection Procedures	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."	Results are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA	NA	NA	NA



Appendix B

Taylor Manufacturing Facility

Tower B
CAM Plan Summary
Monitoring Data

Table 2
Monitoring Approach for Baghouse C120

	INDICATOR NO. 1
I. Indicator	Pressure Drop
Measurement Approach	Measure pressure drop across baghouse with Magnehelic 0-15" H ₂ O differential pressure gauge.
II. Indicator Range	Pressure drop across baghouse control device between 1 and 8 inches water column.
III. Performance Criteria	
A. Data Representativeness	Static pressure is measured at the baghouse inlet and exhaust. The accuracy of the device is +/- 2%.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.
C. QA/QC Practices and Criteria	Trained personnel collect and record data and calibrate monitor.
D. Monitoring Frequency	Once every 8 hours of operation
E. Data Collection Procedures	Results of pressure drop are recorded in log, "Environmental Controls Inspection."
F. Averaging Period	NA

Table 2
Monitoring Approach for Scrubber C-150

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4 (Alternate)
I. Indicator Measurement Approach	Pressure drop Measure pressure drop across scrubber and demister with Capsuhelic 0-20" and Magnehelic 0-1" H ₂ O pressure gauges.	Scrubber Liquid Flow Measure flow to scrubber with Dynasonic Fusions flowmeters.	Scrubber Liquid pH Measure pH of scrubber liquid with a Thermo Orion 3 Star pH probe.	Scrubber Liquid Flow Visual & Motor Power Observe to confirm flow of liquid from scrubber to sludge tank (gravity flow) and record motor power of scrubber liquor recirculation pump.
II. Indicator Range	Pressure drop across the scrubber and demister between 8 to 17 inches.	Liquid flow of at least 45 gpm.	pH between 9.5 and 10.2.	Recirculation pump to draw between 5 and 10 amps.
III. Performance Criteria				
A. Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure in the duct prior to the venturi to the pressure in the duct following the demister. The accuracy of the scrubber gauge is +/- 3%, and +/- 2% for the demister gauge.	Flow is measured prior to spray nozzles following a gate valve. The accuracy of the device is +/- 3%. The repeatability of the device is +/- 1%.	The pH of a sample taken from the sludge tank is measured in the laboratory. The accuracy of the probe is +/- 0.002.	Consistent return flow of liquor from scrubber into the sludge tank is observed by trained personnel.
B. Verification of Operational Status	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated at least once per year. Pressure taps checked daily for plugging.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated as needed.	Monitoring device maintained in accordance with the manufacturer's recommendations and calibrated daily.	Recirculation pump motor maintained in accordance with the manufacturer's recommendations.
C. QA/QC Practices and Criteria	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations. Liquid is drained when necessary.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations.	Trained personnel perform collections. Equipment is calibrated according to manufacturer's recommendations and cleaned and drained monthly.	Trained personnel perform observations of flow and reading of motor power.
D. Monitoring Frequency	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.	Once every 8 hours of operation.
E. Data Collection Procedures	Results are recorded in log, "Environmental Control's Inspection."	Results are recorded in log, "Environmental Control's Inspection."	Results are recorded in log, "Environmental Control's Inspection."	Results are recorded in log, "Environmental Control's Inspection."
F. Averaging Period	NA	NA	NA	NA



Appendix C

Taylor Manufacturing Facility

**Air Operation Permit
Compliance Certification**

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

Notice: Under ss. NR 407.09(4)(a)3. and 439.03(1)(c), Wis. Adm. Code, all sources issued an air operation permit by the Wisconsin Department of Natural Resources must submit an annual (or more frequent) certification of compliance with all operation permit terms and conditions over the reporting period specified in the permit. You may use this form to submit your compliance certification to the Department, and to EPA Region V. Please note that compliance certifications must be signed by a responsible official, as defined in NR 400.02(136), Wis. Adm. Code. Please retain records and all other material information used to certify compliance with your air operation permit for Department review. Use of this Form is voluntary. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information

1) Facility Name **ATLAS RESIN PROPPANTS, LLC**

2) FID: **627005280**

3) a. Permit Number : **627005280-P02**

b. Permit Issue Date: **January 19, 2010**

4) Reporting Period Covered by this Certification: **January 1, 2011 thru December 31, 2011**

5) FOR PART 70 SOURCES ONLY:

All Part-70 sources must also submit a copy of the compliance certification to the **US EPA-Region V**, in addition to the appropriate **WDNR regional field office**. Addresses are listed in your Part-70 air permit. Please check the following box, if applicable to your facility:

☒ A copy of the Compliance Certification has been submitted to US EPA-Region V.

B.) Facility Compliance Information

6) Check either (a) "CONTINUOUS COMPLIANCE" or (b) "INTERMITTENT COMPLIANCE" below
(Terms "continuous" and "intermittent" compliance are defined in Instructions, page 3 of 4).

a) ☒ **Facility Was in Continuous Compliance** (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with all conditions specified in the permit identified in this compliance certification. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification)

b) ☐ **Facility Was in Intermittent Compliance** (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with all conditions specified in the permit identified in this compliance certification, **EXCEPT** for the deviations identified on the attached deviation report. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification, unless otherwise indicated and described in the enclosed deviation report.)

NOTE: If you select this option, you must complete and attach the Air Operation Permit Deviation Summary Report, in which you list deviations from any conditions of the permit for the reporting period covered by this Compliance Certification.

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

C.) Alternative Permit Requirements

In certain circumstances where the underlying applicable requirement allows, permits may include a choice of limits and/or standards, alternate operating scenarios, alternate monitoring methods, alternate recordkeeping, and the like. Where the permit includes such options or alternate requirements, the source must specifically identify the permit terms and conditions which applied over the entire reporting period. Many federal MACT standards provide a choice of emission standards and associated monitoring requirements. For example, the pulp and paper MACT (40 CFR part 63 subpart S) requires certain control devices to either reduce total hazardous air pollutant emissions by weight, or by volume, or through the use of a thermal oxidizer operating under certain parameters, or through other specified means.

7) If the facility operated under alternative permit requirements for all or part of the reporting period covered by this compliance certification, please identify the permit condition that describes the alternative permit requirements, list the emission unit operated according to these requirements, and list the begin and end dates during which the emission unit was operated according to these requirements: (Add additional pages if necessary)

a) Permit Condition Reference: I.E.1.b.(6) and I.J.1.b.(6)	b) Emission Unit: P50 & P150	c) Alternative Requirement Begin and End Date: November 11, 2010 – February 25, 2011 *Released from this monitoring compliance demonstration method on Feb. 25, 2011. See Attached.
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D.) Facility Compliance Certification

NOTE: A responsible official, as defined in s. NR 400.02 (136), Wis. Adm. Code, must sign this compliance certification. Compliance certifications that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's compliance status with respect to *ALL* air operation permit conditions for the reporting period specified in this compliance certification. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.


Signature of Responsible Official

Erica Grant
Typed or Printed Name of Signatory

Production Manager
Title

1, 12, 12
Date

For questions concerning compliance certification, contact your regional compliance engineer by phone, via email, or via facsimile.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
West Central Region Headquarters
PO Box 4001
Eau Claire WI 54702-4001

Scott Walker, Governor
Cathy Stepp, Secretary
Scott Humrickhouse, Regional Director
Telephone 715-839-3700
FAX 715-839-6076
TTY Access via relay - 711



February 25, 2011

Mr. Robbie Sage
Atlas Resin Proppants
P.O. Box 100
N7530 County Road P
Taylor WI 54659

Subject: Particulate Matter Emissions Compliance via NTU Readings – Release from Compliance Demonstration Methods

Dear Mr. Sage:

The Department received notification from Atlas Resin that compliance with conditions I.E.1.b.(6) and I.J.1.b.(6), under permit 627005280-P02 may not be feasible under all operating scenarios. Furthermore, those conditions are not common monitoring parameters required under s. NR 439.055. The conditions require the permittee to monitor the solids content of recirculated scrubber water, maintained between 0 NTU to 550 NTUs (or an alternative range approved in writing by the Department), which will assure compliance with the particulate matter emission limits for the corresponding processes.

Atlas Resin requested, on November 11, 2010, a variance from maintaining NTU values between 0 to 550 until such time the facility conducts stack testing to verify that the NTU values do, or do not, represent a valid measurement of compliance with the particulate matter emission limits. The Department granted the variance on November 11, 2010, which included a requirement for stack testing and verifying the proper NTU range if necessary.

Atlas Resin completed the stack testing, for the sand resin coating process (P150), on January 12, 2011. The results of the test were submitted to the Department on February 9, 2011 (received date). The test results demonstrated compliance with the particulate matter emissions limit of 1.5 pounds per hour, with an actual emissions rate of 0.855 pounds per hour. The test data showed the value of NTU readings were consistently greater than 10,000 units. Therefore, it is apparent that the NTU values do not represent a valid monitoring method to demonstrate compliance with the particulate matter emissions limit.

The Department therefore grants, effective the date of this letter, a release from utilizing this specific monitoring compliance demonstration method, as required under conditions I.E.1.b.(6) and I.J.1.b.(6) of operation permit 627005280-P02. Furthermore, the facility no longer shall be required to record the solids content (NTU values) under conditions I.E.1.c.(3)(d) and I.J.1.c.(3)(d).

Please retain this correspondence with your permit file/records. Furthermore, when the facility applies for its operation permit renewal, please attach this correspondence as a requested change so that the permit may be revised at that time.

Please let me know if you have any questions or concerns, 715-838-8387, or by email at Jeffery.Johnson@Wisconsin.gov.



January 16, 2012

Wisconsin Air and Radiation Division
US EPA
77 W. Jackson Street
Chicago, IL 60604

Dear Sirs,

Please find enclosed a copy of our Certification of Compliance for the period of January 1, 2011 through December 31, 2011, as required under our permit No. 627005280-P02, Part 1, Item ZZZ, Number 3.b.(2).

If you have any questions regarding this information, please feel free to contact me or Ms. Erica Grant at our Taylor facility.

Regards,

A handwritten signature in black ink, reading "Dawn A. Tiffany". The signature is fluid and cursive, with the first name "Dawn" being more prominent.

Dawn A. Tiffany, MS, CSP
Safety, Health & Environmental Specialist
dtiffany@atlasresinproppants.com
715-662-2200, ext. 234

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

Notice: Under ss. NR 407.09(4)(a)3. and 439.03(1)(c), Wis. Adm. Code, all sources issued an air operation permit by the Wisconsin Department of Natural Resources must submit an annual (or more frequent) certification of compliance with all operation permit terms and conditions over the reporting period specified in the permit. You may use this form to submit your compliance certification to the Department, and to EPA Region V. Please note that compliance certifications must be signed by a responsible official, as defined in NR 400.02(136), Wis. Adm. Code. Please retain records and all other material information used to certify compliance with your air operation permit for Department review. Use of this Form is voluntary. Personally identifiable information collected on this Form is unlikely to be used for any purpose other than that for which it was originally collected, but may be provided to requesters as required by Wisconsin's Open Records law (ss. 19.31-19.39, Wis. Stats.).

A.) Facility Information

1) Facility Name **ATLAS RESIN PROPPANTS, LLC**

2) FID: **627005280**

3) a. Permit Number : **627005280-P02**

b. Permit Issue Date: **January 19, 2010**

4) Reporting Period Covered by this Certification: **January 1, 2011 thru December 31, 2011**

5) FOR PART 70 SOURCES ONLY:

All Part-70 sources must also submit a copy of the compliance certification to the **US EPA-Region V**, in addition to the appropriate **WDNR regional field office**. Addresses are listed in your Part-70 air permit. Please check the following box, if applicable to your facility:

☒ A copy of the Compliance Certification has been submitted to US EPA-Region V.

COPY

B.) Facility Compliance Information

6) Check either (a) "CONTINUOUS COMPLIANCE" or (b) "INTERMITTENT COMPLIANCE" below
(Terms "continuous" and "intermittent" compliance are defined in Instructions, page 3 of 4).

a) ☒ **Facility Was in Continuous Compliance** (During the entire reporting period identified in this compliance certification, this facility was in **continuous** compliance with **all** conditions specified in the permit identified in this compliance certification. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification)

b) ☐ **Facility Was in Intermittent Compliance** (During the entire reporting period identified in this compliance certification, this facility was in continuous compliance with **all** conditions specified in the permit identified in this compliance certification, **EXCEPT** for the deviations identified on the attached deviation report. The method used to determine compliance for each condition is the method specified in the permit identified in this compliance certification, unless otherwise indicated and described in the enclosed deviation report.)

NOTE: If you select this option, you must complete and attach the Air Operation Permit Deviation Summary Report, in which you list deviations from any conditions of the permit for the reporting period covered by this Compliance Certification.

Air Operation Permit Compliance Certification
Form 4530-170 (R 10/10)

C.) Alternative Permit Requirements

In certain circumstances where the underlying applicable requirement allows, permits may include a choice of limits and/or standards, alternate operating scenarios, alternate monitoring methods, alternate recordkeeping, and the like. Where the permit includes such options or alternate requirements, the source must specifically identify the permit terms and conditions which applied over the entire reporting period. Many federal MACT standards provide a choice of emission standards and associated monitoring requirements. For example, the pulp and paper MACT (40 CFR part 63 subpart S) requires certain control devices to either reduce total hazardous air pollutant emissions by weight, or by volume, or through the use of a thermal oxidizer operating under certain parameters, or through other specified means.

7) If the facility operated under alternative permit requirements for all or part of the reporting period covered by this compliance certification, please identify the permit condition that describes the alternative permit requirements, list the emission unit operated according to these requirements, and list the begin and end dates during which the emission unit was operated according to these requirements: (Add additional pages if necessary)

a) Permit Condition Reference: I.E.1.b.(6) and I.J.1.b.(6)	b) Emission Unit: P50 & P150	c) Alternative Requirement Begin and End Date: November 11, 2010 – February 25, 2011 *Released from this monitoring compliance demonstration method on Feb. 25, 2011. See Attached.
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D.) Facility Compliance Certification

NOTE: A responsible official, as defined in s. NR 400.02 (136), Wis. Adm. Code, must sign this compliance certification. Compliance certifications that are not signed by a responsible official will be returned as incomplete.

I have reviewed this facility's compliance status with respect to *ALL* air operation permit conditions for the reporting period specified in this compliance certification. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.



Signature of Responsible Official

Erica Grant

Typed or Printed Name of Signatory

Production Manager

Title

1, 12, 12

Date

For questions concerning compliance certification, contact your regional compliance engineer by phone, via email, or via facsimile.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
West Central Region Headquarters
PO Box 4001
Eau Claire WI 54702-4001

Scott Walker, Governor
Cathy Stepp, Secretary
Scott Humrickhouse, Regional Director
Telephone 715-839-3700
FAX 715-839-6076
TTY Access via relay - 711



February 25, 2011

Mr. Robbie Sage
Atlas Resin Proppants
P.O. Box 100
N7530 County Road P
Taylor WI 54659

Subject: Particulate Matter Emissions Compliance via NTU Readings – Release from Compliance Demonstration Methods

Dear Mr. Sage:

The Department received notification from Atlas Resin that compliance with conditions I.E.1.b.(6) and I.J.1.b.(6), under permit 627005280-P02 may not be feasible under all operating scenarios. Furthermore, those conditions are not common monitoring parameters required under s. NR 439.055. The conditions require the permittee to monitor the solids content of recirculated scrubber water, maintained between 0 NTU to 550 NTUs (or an alternative range approved in writing by the Department), which will assure compliance with the particulate matter emission limits for the corresponding processes.

Atlas Resin requested, on November 11, 2010, a variance from maintaining NTU values between 0 to 550 until such time the facility conducts stack testing to verify that the NTU values do, or do not, represent a valid measurement of compliance with the particulate matter emission limits. The Department granted the variance on November 11, 2010, which included a requirement for stack testing and verifying the proper NTU range if necessary.

Atlas Resin completed the stack testing, for the sand resin coating process (P150), on January 12, 2011. The results of the test were submitted to the Department on February 9, 2011 (received date). The test results demonstrated compliance with the particulate matter emissions limit of 1.5 pounds per hour, with an actual emissions rate of 0.855 pounds per hour. The test data showed the value of NTU readings were consistently greater than 10,000 units. Therefore, it is apparent that the NTU values do not represent a valid monitoring method to demonstrate compliance with the particulate matter emissions limit.

The Department therefore grants, effective the date of this letter, a release from utilizing this specific monitoring compliance demonstration method, as required under conditions I.E.1.b.(6) and I.J.1.b.(6) of operation permit 627005280-P02. Furthermore, the facility no longer shall be required to record the solids content (NTU values) under conditions I.E.1.c.(3)(d) and I.J.1.c.(3)(d).

Please retain this correspondence with your permit file/records. Furthermore, when the facility applies for its operation permit renewal, please attach this correspondence as a requested change so that the permit may be revised at that time.

Please let me know if you have any questions or concerns, 715-838-8387, or by email at Jeffery.Johnson@Wisconsin.gov.

State of Wisconsin Department of Natural Resources
Bureau of Air Management

FID: 627005280

627005280 Atlas Resin Proppants, LLC
N7500 COUNTY ROAD P
TAYLOR

DNR Region: West Central

County: Jackson

SIC Code: 2899 -- CHEMICAL PREPARATIONS,
NEC

NAICS Code: 325998 -- All Other Miscellaneous Chemical Product and Preparation Manufacturing

Constr Date:

Employees: 59

Area: 442134 ft2

UTM Zone: 15

UTM X: 649540 m

UTM Y: 4911590 m

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Facility Air Management Contact

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Dan Valiquette
Facility Billing Contact

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Erica Grant
Facility Responsible Official

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MARTIN SELLERS
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**State of Wisconsin Department of Natural Resources
Bureau of Air Management**

FID: 627005280

DEVICE AND PROCESS LIST

<u>DEVICE ID</u>	<u>DEVICE CODE</u>	<u>DEVICE NAME</u>	<u>DEVICE CATEGORY</u>
<u>> PROCESS ID</u>	<u>> PROCESS CODE</u>	<u>> PROCESS NAME</u>	<u>> PROCESS DESCRIPTION</u>
C14 --> 00	BAGHOUSE CONTROLLING	Panel Filter Raw Silo Bin Filters - Tower A & B	Baghouse/Fabric Filter Used for collectors
C19 --> 01	CYCLONE CONTROLLING	Cyclone - Tower A and B	Cyclone/Settling Chambers Used for collectors
C20 --> 00	BAGHOUSE CONTROLLING	Baghouse - Tower A and B Baghouse	Baghouse/Fabric Filter Used for collectors
C50 --> 00	SCRUBBER CONTROLLING	Wet Scrubber - Tower A & B Wet Scrubber	Wet Collection Systems Used for collectors
F11 --> 01	GENERIC GENERIC	Rail Car Unloading - Tower A and B UnLoading	Miscellaneous Generic Throughput Process
F61 --> 01	GENERIC GENERIC	Railcar Loading - Tower A and B Railcar Loading - Tower A & B	Miscellaneous Generic Throughput Process
P14 --> 00	SILO GENERIC	Raw Silos - Tower A and B Raw Silos	Miscellaneous Generic Throughput Process
P16 --> 00	CONVEYOR GENERIC	Conveyors - Tower A & B Conveyors	Miscellaneous Generic Throughput Process
P24 --> 01	PROCESS HEATER GENERIC	Raw Material Heater - Tower A & B Combustion of fuels at atmospheric pressure	Boiler/Furnace Generic Throughput Process
P24A --> 01	GENERIC GENERIC	Dust Emissions from Towers A and B Sand Heating	Miscellaneous Generic Throughput Process
P51 --> 00	GENERIC GENERIC	Batch and Continuous Mixers - Tower A and B Batch & Continuous Mixers (Tower Vents)	Miscellaneous Generic Throughput Process
--> 01	GENERIC	Batch & Continuous Mixers (Scrubber)	Generic Throughput Process

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

EMISSION FLOW SUMMARY

F11-01 (100%) --> OUT

F61-01 (100%) --> OUT

P14-00 (100%) --> C14-00 (100%) --> S14-00 (100%) --> OUT

P16-00 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P24-01 (100%) --> C19-01 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P24A-01 (100%) --> C19-01 (100%) --> C20-00 (100%) --> S20-00 (100%) --> OUT

P51-00 (100%) --> OUT

P51-01 (100%) --> C50-00 (100%) --> S50-00 (100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

Page: 4
FID: 627005280

DEVICES / PROCESSES DETAILS

C14**Baghouse/Fabric Filter****Baghouse****DEVICE DESC:** Panel Filter**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This baghouse is the control device for all raw silos and includes C14, C15, C22, C114, C115.**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	90%
PM	90%

C14, Process 00**Used for collectors****PROCESS NAME:** Raw Silo Bin Filters - Tower
A & B**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

--INCOMING STREAMS--

P14-00 (100%) --> C14-00

--OUTGOING STREAMS--C14-00 (100%) --> S14-00
(100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

C19 Cyclone/Settling Chambers Cyclone

DEVICE DESC: Cyclone - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes C19 and C119**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	90%
PM	90%

C19, Process 01 Used for collectors**PROCESS NAME:****PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

--INCOMING STREAMS--

P24A-01 (100%) --> C19-01

P24-01 (100%) --> C19-01

--OUTGOING STREAMS--

C19-01 (100%) --> C20-00

(100%) --> S20-00 (100%) -->

OUT

C20 Baghouse/Fabric Filter Baghouse

DEVICE DESC: Baghouse - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes C20 and C120**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	99.7%
PM	99.7%

C20, Process 00 Used for collectors**PROCESS NAME:** Baghouse**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

--INCOMING STREAMS--

P16-00 (100%) --> C20-00

C19-01 (100%) --> C20-00

--OUTGOING STREAMS--

C20-00 (100%) --> S20-00

(100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

C50 Wet Collection Systems Scrubber

DEVICE DESC: Wet Scrubber - Tower A & B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This scrubber includes C50 and C150.**--CTRL EFFIC--**

<u>POLLUTANT</u>	<u>VALUE</u>
PM10	71%
PHENOL	54.5%
PM	71%
ROG	64%
AMMONIA	0%

C50, Process 00 Used for collectors**PROCESS NAME:** Wet Scrubber**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

--INCOMING STREAMS--

P51-01 (100%) --> C50-00

P52-01 (100%) --> C50-00

--OUTGOING STREAMS--C50-00 (100%) --> S50-00
(100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

F11**Miscellaneous****Any Device****DEVICE DESC:** Rail Car Unloading - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** Includes F11 and F111**F11, Process 01****Generic Throughput
Process****PROCESS NAME:** UnLoading**SCC CODE:** 30502506**PROCESS COMMENTS:****SCHEDULE:** 8 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

ANNUAL TPUT: 524517600 LBof PRODUCT -
MINERALS**AVG TPUT:** 202360.18519 LB/HR**MAX TPUT:** 400000 LB/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	.003 LB / TON	OTHR
PM10	.0011 LB / TON	OTHR

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	786.776 LB	786.776 LB	
PM10 (c)	10000 LB	288.485 LB	288.485 LB	

--INCOMING STREAMS--

TPUT --> F11-01

--OUTGOING STREAMS--

F11-01 (100%) --> OUT

**State of Wisconsin Department of Natural Resources
Bureau of Air Management**

FID: 627005280

F61	Miscellaneous	Any Device
DEVICE DESC: Railcar Loading - Tower A and B CONSTR DATE: 12/01/2005 DEVICE COMMENTS: Includes F61 and F161		

F61, Process 01

Generic Throughput Process

PROCESS NAME: Railcar Loading - Tower A & B

SCC CODE: 30502503

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

QTRLY SCHEDULE: Q1: 25%

ANNUAL TPUT: 536625693 LB

AVG TPUT: 69010.50579 LB/HR

MAX TPUT: 240000 LB/HR

7 Dys/Wk	324 Dys/Yr	
Q2: 25%	Q3: 25%	Q4: 25%
of PRODUCT - MINERALS		

--EMISSION FACTORS--

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	.003 LB / TON	OTHR
PM10	.0011 LB / TON	OTHR

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	804.939 LB	804.939 LB	
PM10 (c)	10000 LB	295.144 LB	295.144 LB	

--INCOMING STREAMS--

TPUT --> F61-01

--OUTGOING STREAMS--

F61-01 (100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

P14**Miscellaneous Silo****DEVICE DESC:** Raw Silos - Tower A and B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This device includes emissions from P14, P15, P22, P114, P115. All are raw silos.**P14, Process 00****Generic Throughput Process****PROCESS NAME:** Raw Silos**SCC CODE:** 30502502**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

ANNUAL TPUT: 262258 TONof PRODUCT -
MINERALS**AVG TPUT:** 33.72659 TON/HR**MAX TPUT:** 100 TON/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	.000615 LB / TON	AP42
PM10	.000291 LB / TON	AP42

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	161.289 LB	16.129 LB	
PM10 (c)	10000 LB	76.317 LB	7.632 LB	

--INCOMING STREAMS--

TPUT --> P14-00

--OUTGOING STREAMS--

P14-00 (100%) --> C14-00
 (100%) --> S14-00 (100%) -->
 OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

P16**Miscellaneous Conveyor****DEVICE DESC:** Conveyors - Tower A & B**CONSTR DATE:** 12/01/2005

DEVICE COMMENTS: This device includes closed loop devices of P13, P16, P17, P48, P21, P23, P27, P28, P29, P41, P42, P43, P44, P45, P46, P47, P49, P71, P113, P116, P117, P121, P122, P127, P128, P129, P141, P142, P143, P144, P145, P146, P147, P148, P161, and P163.

P16, Process 00**Generic Throughput Process****PROCESS NAME:** Conveyors**SCC CODE:** 30502503**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

ANNUAL TPUT: 262258 TON

of PRODUCT - MINERALS

AVG TPUT: 33.72659465021 TON/HR**MAX TPUT:** 200 TON/HR**--EMISSION FACTORS--**

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
PM	.029 LB / TON	OTHR
PM10	.0064 LB / TON	OTHR

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (r)	10000 LB	3,380.000 LB	3,380.000 LB	
PM10 (r)	10000 LB	3,380.000 LB	3,380.000 LB	

--INCOMING STREAMS--

TPUT --> P16-00

--OUTGOING STREAMS--

P16-00 (100%) --> C20-00
 (100%) --> S20-00 (100%) -->
 OUT

P24**Boiler/Furnace Process Heater****DEVICE DESC:** Raw Material Heater - Tower A & B**CONSTR DATE:** 12/01/2005**DEVICE COMMENTS:** This device includes P24 and P123**MAX RATED CAPACITY:** MMBTU/HR**P24, Process 01****Generic Throughput Process****PROCESS NAME:** Combustion of fuels at atmospheric pressure**SCC CODE:** 10200602**PROCESS COMMENTS:****SCHEDULE:** 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 25%

Q2: 25%

Q3: 25%

Q4: 25%

ANNUAL TPUT: 49.72 MMCF

of Natural Gas

**State of Wisconsin Department of Natural Resources
Bureau of Air Management**

FID: 627005280

AVG TPUT: 6.39403 E3 FT3/H

MAX TPUT: 20 E3 FT3/H

--EMISSION FACTORS--

<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>
AMMONIA	3.2 LB / MMCF	EPA
ARSENIC	.0002 LB / MMCF	EPA
BARIUM	.0044 LB / MMCF	EPA
BENZ(A)ANTHR	.0000018 LB / MMCF	EPA
BENZENE	.0021 LB / MMCF	EPA
BENZO(A)PHEN	.0000018 LB / MMCF	EPA
BENZO(A)PYRE	.0000012 LB / MMCF	EPA
BENZO(B)FLUO	.0000018 LB / MMCF	EPA
BENZO(JK)FLE	.000003 LB / MMCF	EPA
BENZO(K)FLUO	.0000018 LB / MMCF	EPA
BERYLLIUM	.000012 LB / MMCF	EPA
CADMIUM	.0011 LB / MMCF	EPA
CHROMIUM MET	.0014 LB / MMCF	EPA
CO	84 LB / MMCF	EPA
CO2	120000 LB / MMCF	EPA
COBALT	.000084 LB / MMCF	EPA
COPPER	.00085 LB / MMCF	EPA
DIBENZAHAH	.0000012 LB / MMCF	EPA
FORMALDEHYDE	.075 LB / MMCF	EPA
HEXANE	1.8 LB / MMCF	EPA
INDN(123CDPY	.0000018 LB / MMCF	EPA
LEAD CMP	.0005 LB / MMCF	EPA
MANGANESE	.00038 LB / MMCF	EPA
MERCURY ALL	.00026 LB / MMCF	EPA
METHANE	2.3 LB / MMCF	EPA
MOLYBDENUM	.0011 LB / MMCF	EPA
NAPHTHALENE	.00061 LB / MMCF	EPA
NICKEL CMP	.0021 LB / MMCF	EPA
NITROUSOXIDE	2.2 LB / MMCF	EPA
NOX	100 LB / MMCF	EPA
PM	8.6 LB / MMCF	EPA
PM10	8.6 LB / MMCF	EPA
ROG	5.5 LB / MMCF	EPA
SELENIUM	.000024 LB / MMCF	EPA
SO2	.6 LB / MMCF	EPA
TOLUENE	.0034 LB / MMCF	EPA
VANADIUM	.0023 LB / MMCF	EPA

--EMISSIONS / YR--

<u>POLLUTANT</u>	<u>NR438 THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
CO (c)	10000 LB	4,176.480 LB	4,176.480 LB	
NOX (c)	10000 LB	4,972.000 LB	4,972.000 LB	13.659 LB
PM (c)	10000 LB	427.592 LB	.128 LB	
PM10 (c)	10000 LB	427.592 LB	.128 LB	
ROG (c)	6000 LB	273.460 LB	273.460 LB	.751 LB
SO2 (c)	10000 LB	29.832 LB	29.832 LB	
AMMONIA (c) (s)	4097 LB	159.104 LB	159.104 LB	
ARSENIC (c) (fs)	.21 LB	.010 LB	.010 LB	
BARIUM (c) (s)	118 LB	.219 LB	.219 LB	
BENZ(A)ANTHR (c) (s)	8.08 LB	.000 LB	.000 LB	
BENZENE (c) (fs)	114 LB	.104 LB	.104 LB	
BENZO(A)PHEN (c)	12 LB	.000 LB	.000 LB	
BENZO(A)PYRE (c) (s)	.81 LB	.000 LB	.000 LB	
BENZO(B)FLUO (c) (s)	1.22 LB	.000 LB	.000 LB	
BENZO(JK)FLE (c)	12 LB	.000 LB	.000 LB	
BENZO(K)FLUO (c) (s)	1.22 LB	.000 LB	.000 LB	

**State of Wisconsin Department of Natural Resources
Bureau of Air Management**

FID: 627005280

BERYLLIUM (c) (fs)	.37 LB	.001 LB	.001 LB
CADMIUM (c) (fs)	.49 LB	.055 LB	.055 LB
CHROMIUM MET (c) (fs)	118 LB	.070 LB	.070 LB
CO2 (c)	200000000 LB	5,966,400.000 LB	5,966,400.000 LB
COBALT (c) (fs)	4.71 LB	.004 LB	.004 LB
COPPER (c) (s)	235 LB	.042 LB	.042 LB
DIBENZAHAN (c) (s)	.74 LB	.000 LB	.000 LB
FORMALDEHYDE (c)	68.3 LB	3.729 LB	3.729 LB
(fs)			
HEXANE (c) (fs)	6000 LB	89.496 LB	89.496 LB
INDN(123CDPY (c) (s)	8.08 LB	.000 LB	.000 LB
LEAD CMP (c) (f)	400 LB	.025 LB	.025 LB
MANGANESE (c) (fs)	47.1 LB	.019 LB	.019 LB
MERCURY ALL (c) (fs)	5.88 LB	.013 LB	.013 LB
METHANE (c)	100000000 LB	114.356 LB	114.356 LB
MOLYBDENUM (c) (s)	1176 LB	.055 LB	.055 LB
NAPHTHALENE (c) (fs)	6000 LB	.030 LB	.030 LB
NICKEL CMP (c) (fs)	3.42 LB	.104 LB	.104 LB
NITROUSOXIDE (c) (s)	6000 LB	109.384 LB	109.384 LB
SELENIUM (c) (fs)	47.1 LB	.001 LB	.001 LB
TOLUENE (c) (fs)	6000 LB	.169 LB	.169 LB
VANADIUM (c) (s)	11.8 LB	.114 LB	.114 LB

--INCOMING STREAMS--

TPUT --> P24-01

--OUTGOING STREAMS--

P24-01 (100%) --> C19-01

(100%) --> C20-00 (100%) -->

S20-00 (100%) --> OUT

**State of Wisconsin Department of Natural Resources
Bureau of Air Management**

FID: 627005280

SCHEDULE: 24 Hrs/Day		7 Dys/Wk	324 Dys/Yr	
QTRLY SCHEDULE: Q1: 25%		Q2: 25%	Q3: 25%	Q4: 25%
ANNUAL TPUT: 18489 LB		of PRODUCT - CHEMICAL		
AVG TPUT: 2.3777 LB/HR				
MAX TPUT: 8 LB/HR				
--EMISSION FACTORS--				
<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>		
AMMONIA	1 LB / LB	MBAL		
CO	0 LB / TON	EPA		
PHENOL	0 LB / TON	EPA		
ROG	0 LB / TON	EPA		
--EMISSIONS / YR--				
<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
AMMONIA (c) (s)	4097 LB	18,489.000 LB	18,489.000 LB	
--INCOMING STREAMS--				
TPUT --> P51-00				
--OUTGOING STREAMS--				
P51-00 (100%) --> OUT				

P51, Process 01**Generic Throughput
Process****PROCESS NAME:** Batch & Continuous Mixers
(Scrubber)**SCC CODE:** 30502506**PROCESS COMMENTS:**

SCHEDULE: 24 Hrs/Day		7 Dys/Wk	324 Dys/Yr	
QTRLY SCHEDULE: Q1: 25%		Q2: 25%	Q3: 25%	Q4: 25%
ANNUAL TPUT: 536625693 LB		of PRODUCT - MINERALS		
AVG TPUT: 69010.50579 LB/HR				
MAX TPUT: 75000 LB/HR				

--EMISSION FACTORS--				
<u>POLLUTANT</u>	<u>VALUE / UNIT</u>	<u>ORIGIN</u>		
AMMONIA	.91876878 LB / TON	STK		
PHENOL	.241 LB / TON	STK		
PM	.271 LB / TON	STK		
PM10	.271 LB / TON	STK		
ROG	.241 LB / TON	STK		
--EMISSIONS / YR--				
<u>POLLUTANT</u>	<u>NR438_THRESH</u>	<u>UNCNTRLD</u>	<u>CNTRLD</u>	<u>OZONE/DY</u>
PM (c)	10000 LB	72,712.781 LB	21,086.707 LB	
PM10 (c)	10000 LB	72,712.781 LB	21,086.707 LB	
ROG (c)	6000 LB	64,663.396 LB	23,278.823 LB	63.953 LB
AMMONIA (c) (s)	4097 LB	246,517.467 LB	246,517.467 LB	
PHENOL (c) (fs)	4528 LB	64,663.396 LB	29,421.845 LB	
--INCOMING STREAMS--				
TPUT --> P51-01				
--OUTGOING STREAMS--				
P51-01 (100%) --> C50-00				
(100%) --> S50-00 (100%) --> OUT				

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

S14**Stack Stack**

DEVICE DESC: S14 is the discharge stack for all raw silos and includes S14, S15, S22, S114, and S115

CONSTR DATE: 12/01/2005

DEVICE COMMENTS:

STACK HEIGHT: 18.9 m

or 62.01 ft

STACK DIAMETER: .05 m

or .16 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: .01 m/s

or .03 ft/s

S14, Process 00**Releasing/Discharging
material to the
atmosphere**

PROCESS NAME: Raw Silos Discharge Stack
- Tower A & B

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C14-00 (100%) --> S14-00

--OUTGOING STREAMS--

S14-00 (100%) --> OUT

S20**Stack Stack**

DEVICE DESC: Baghouse Discharge Stack - Tower A & B. Includes S120.

CONSTR DATE: 12/01/2005

DEVICE COMMENTS:

STACK HEIGHT: 4.9 m

or 16.08 ft

STACK DIAMETER: .76 m

or 2.49 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: 11.9 m/s

or 39.04 ft/s

S20, Process 00**Releasing/Discharging
material to the
atmosphere**

PROCESS NAME: Baghouse Discharge Stack
- Tower A & B

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C20-00 (100%) --> S20-00

--OUTGOING STREAMS--

S20-00 (100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

S50**Stack****Stack**

DEVICE DESC: Wet Scrubber Discharge Stack - Tower A & B. This
stack includes S50 and S150

CONSTR DATE: 12/01/2005

DEVICE COMMENTS:

STACK HEIGHT: 25.6 m

or 83.99 ft

STACK DIAMETER: .61 m

or 2 ft

STACK TEMP: 293 K

or 67.73 F

STACK VELOCITY: 9.7 m/s

or 31.82 ft/s

S50, Process 00

**Releasing/Discharging
material to the
atmosphere**

PROCESS NAME: Wet Scrubber Discharge
Stack - Tower A & B

PROCESS COMMENTS:

SCHEDULE: 24 Hrs/Day

7 Dys/Wk

324 Dys/Yr

QTRLY SCHEDULE: Q1: 24%

Q2: 22%

Q3: 27%

Q4: 27%

--INCOMING STREAMS--

C50-00 (100%) --> S50-00

--OUTGOING STREAMS--

S50-00 (100%) --> OUT

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

FACILITY EMISSIONS SUMMARY

-2011 SUMMARY-	--2011--	--2011--	--2011--	--2011--
<u>--POLLUTANT--</u>	<u>--NR438_THRESH--</u>	<u>--UNCNTRLD/YR--</u>	<u>--CNTRLD/YR--</u>	<u>--OZONE/DY--</u>
CO	10000 LB	4,176.48000 LB	4,176.48000 LB	
NOX	10000 LB	13,101.99800 LB	13,101.99800 LB	35.99450 LB
PM	10000 LB	85,878.85901 LB	26,076.96034 LB	
PM10	10000 LB	78,858.77049 LB	25,058.59894 LB	
ROG	6000 LB	64,936.85601 LB	23,552.28256 LB	64.70407 LB
SO2	10000 LB	29.83200 LB	29.83200 LB	
AMMONIA (s)	4097 LB	265,165.57064 LB	265,165.57064 LB	
ARSENIC (fs)	.21 LB	.00994 LB	.00994 LB	
BARIUM (s)	118 LB	.21877 LB	.21877 LB	
BENZ(A)ANTHR (s)	8.08 LB	.00009 LB	.00009 LB	
BENZENE (fs)	114 LB	.10441 LB	.10441 LB	
BENZO(A)PHEN	12 LB	.00009 LB	.00009 LB	
BENZO(A)PYRE	.81 LB	.00006 LB	.00006 LB	
(s)				
BENZO(B)FLUO (s)	1.22 LB	.00009 LB	.00009 LB	
BENZO(JK)FLE	12 LB	.00015 LB	.00015 LB	
BENZO(K)FLUO (s)	1.22 LB	.00009 LB	.00009 LB	
BERYLLIUM (fs)	.37 LB	.00060 LB	.00060 LB	
CADMIUM (fs)	.49 LB	.05469 LB	.05469 LB	
CHROMIUM MET	118 LB	.06961 LB	.06961 LB	
(fs)				
CO2	200000000 LB	5,966,400.00000 LB	5,966,400.00000 LB	
COBALT (fs)	4.71 LB	.00418 LB	.00418 LB	
COPPER (s)	235 LB	.04226 LB	.04226 LB	
DIBENZAHAH (s)	.74 LB	.00006 LB	.00006 LB	
FORMALDEHYDE	68.3 LB	3.72900 LB	3.72900 LB	
(fs)				
HEXANE (fs)	6000 LB	89.49600 LB	89.49600 LB	
INDN(123CDPY (s)	8.08 LB	.00009 LB	.00009 LB	
LEAD CMP (f)	400 LB	.02486 LB	.02486 LB	
MANGANESE (fs)	47.1 LB	.01889 LB	.01889 LB	
MERCURY ALL (fs)	5.88 LB	.01293 LB	.01293 LB	
METHANE	10000000 LB	114.35600 LB	114.35600 LB	
MOLYBDENUM (s)	1176 LB	.05469 LB	.05469 LB	
NAPHTHALENE	6000 LB	.03033 LB	.03033 LB	
(fs)				
NICKEL CMP (fs)	3.42 LB	.10441 LB	.10441 LB	
NITROUSOXIDE	6000 LB	109.38400 LB	109.38400 LB	
(s)				
PHENOL (fs)	4528 LB	64,663.39601 LB	29,421.84518 LB	
SELENIUM (fs)	47.1 LB	.00119 LB	.00119 LB	
TOLUENE (fs)	6000 LB	.16905 LB	.16905 LB	
VANADIUM (s)	11.8 LB	.11436 LB	.11436 LB	
-2010 SUMMARY-	--2010--	--2010--	--2010--	--2010--
<u>--POLLUTANT--</u>	<u>--NR438_THRESH--</u>	<u>--UNCNTRLD/YR--</u>	<u>--CNTRLD/YR--</u>	<u>--OZONE/DY--</u>
NOX	10000 LB	12,390.73700 LB	12,390.73700 LB	34.04049 LB
PM	10000 LB	1,306,792.22396 LB	24,497.53095 LB	

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

PM10	10000 LB	631,217.01482 LB	21,289.97393 LB	
ROG	6000 LB	58,488.50630 LB	21,230.86259 LB	58.32655 LB
AMMONIA(S)	4097 LB	616,603.97238 LB	602,516.16345 LB	
PHENOL(FS)	4528 LB	58,215.06830 LB	26,487.85608 LB	

2011 Air Emissions Inventory Summary Report
State of Wisconsin Department of Natural Resources
Bureau of Air Management

REPORT LEGEND

--EMISSIONS--

c = Calculated; r = Reported

f = Federal Hap; s = State Hap; fs = Fed and State Hap